IN THE CLAIMS

1. (Currently Amended) A video processing method comprising the steps of:

dividing an ~~entire~~ input data region representative of a range of digital luminance data into a plurality of ~~three of first, second and third~~ regions comprising substantially all of said input data region ~~in order, from the low level side thereof~~;

selecting one of a plurality of output data correction characteristics, each of said plurality of output data correction characteristics being non-linear as a whole, but comprising a linear portion coextensive with each of said plurality of regions and having different slopes in at least two of said regions;

~~setting, as an said output data characteristic to input data, a trapezoidal characteristic which is nonlinear and continuous as a whole and consists of a linear portion in said first region where the gain is greater than one, a linear portion in said second region where the gain is equal to one exactly or approximately, and a linear portion in said third region where the gain is smaller than one;~~ and

correcting digital luminance data in accordance with said ~~trapezoidal~~ selected output data correction characteristic.

2. (Currently Amended) A video processing method comprising the steps of:

dividing an input data region representative of a range of digital color difference data into a plurality of regions comprising substantially all of said input data region;

selecting one of a plurality of output data correction characteristics, each of said plurality of output data correction characteristics being non-linear as a whole, but comprising a linear portion coextensive with each of said plurality of regions and having different slopes in at least two of said regions;

~~correcting digital luminance data in accordance with the trapezoidal characteristic which is nonlinear and continuous as a whole and consists of a linear portion in said first region where the gain is greater than one, a linear portion in said second region where the gain is equal to one exactly or approximately, and a linear portion in said third region where the gain is smaller than one;~~ and

executing gain control or hue control with regard to digital color difference data or other digital color data.

3. (Currently Amended) A video processing method comprising the steps of:

dividing an input data region representative of a range of color difference data into a plurality of regions comprising substantially all of said input data region;

selecting one of a plurality of output data correction characteristics, each of said plurality of output data correction characteristics being non-linear as a whole, but comprising a linear portion coextensive with each of said plurality of regions and having different slopes in at least two of said regions;

separating luminance data and color difference data from digital video data which are composed of the luminance data and the color difference data ~~combined~~ to be ~~multiplex~~ multiplexed;

~~correcting the separated luminance data in accordance with the trapezoidal characteristic which is nonlinear and continuous as a whole and consists of a linear portion in said first region where the gain is greater than one, a linear portion in said second region where the gain is equal to one exactly or approximately, and a linear portion in said third region where the gain is smaller than one;~~ and

executing gain control or hue control with regard to the separated color difference data.

4. (Currently Amended) A video processing method comprising the steps of:

dividing an ~~entire~~ input data region representative of a range of digital luminance data into a plurality of ~~three of first, second and third~~ regions comprising substantially all of said input data region ~~in order, from the low level side thereof~~;

selecting one of a plurality of output data correction characteristics, each of said plurality of output data correction characteristics being non-linear as a whole, but comprising a linear portion coextensive with each of said plurality of regions and having different slopes in at least two of said regions;

wherein at least one of said ~~setting, as an~~ output data characteristics is a ~~characteristic to input data, the~~ trapezoidal characteristic which is nonlinear and continuous as a whole and consists of a linear portion in said first region where the gain is greater than one, a linear portion in said second region where the gain is equal to one exactly or approximately, and a linear portion in said third region where the gain is smaller than one; and

~~setting, as another~~ wherein at least one of said output data ~~characteristic,~~ characteristics is an S-shaped characteristic which is nonlinear and continuous as a whole and consists of linear portions in said first and third regions where the gain is smaller than one, and a linear portion in said second region where the gain is greater than one; and

~~selecting either said trapezoidal characteristic or said S-shaped characteristic;~~ and

correcting digital luminance data in accordance with the selected output data correction characteristic.

5. (Currently Amended) A video processing method comprising the steps of:

dividing an input data region representative of a range of color difference data into a plurality of regions comprising substantially all of said input data region;

selecting one of a plurality of output data correction characteristics, each of said plurality of output data correction characteristics being non-linear as a whole, but comprising a linear portion coextensive with each of said plurality of regions and having different slopes in at least two of said regions;

~~selecting either the~~ wherein one of said plurality of output data correction characteristics is a trapezoidal characteristic which is nonlinear and continuous as a whole and consists of a linear portion in ~~said~~ a first region where the gain is greater than one, a linear portion in ~~said~~ a second region where the gain is equal to one exactly or approximately, and a linear portion in ~~said~~ a third region where the gain is smaller than one ~~or the~~ , and one of said plurality of output data correction characteristics is an S-shaped characteristic which is nonlinear and continuous as a whole and consists of linear portions in said first and third regions where the gain is smaller than one, and a linear portion in said second region where the gain is greater than one;

correcting the digital luminance data in accordance with the selected output data correction characteristic; and

executing gain control or hue control with regard to digital color difference data or other digital color data.

6. (Currently Amended) A video processing method comprising the steps of:

dividing an input data region representative of a range of color difference data into a plurality of regions comprising substantially all of said input data region;

selecting one of a plurality of output data correction characteristics, each of said plurality of output data correction characteristics being non-linear as a whole, but comprising a linear portion coextensive with each of said plurality of regions and having different slopes in at least two of said regions;

separating luminance data and color difference data from digital video data which are composed of the luminance data and the color difference data ~~combined~~ to be ~~multiplex~~ multiplexed;

~~selecting either the~~ wherein one of said plurality of output data correction characteristics is a trapezoidal characteristic which is nonlinear and continuous as a whole and consists of a linear portion in ~~said~~ a first region where the gain is greater than one, a linear portion in ~~said~~ a second region where the gain is equal to one exactly or approximately, and a linear portion in ~~said~~ a third region where the gain is smaller than one ~~or the~~ , and one of said plurality of output data correction characteristics is an S-shaped characteristic which is nonlinear and continuous as a whole and consists of linear portions in said first and third regions where the gain is smaller than one, and a linear portion in said second region where the gain is greater than one;

correcting the separated luminance data in accordance with the selected output data correction characteristic; and

executing gain control or hue control with regard to the separated color difference data.

7. (Currently Amended) The video processing method according to claim 1, wherein said ~~trapezoidal~~ selected output data correction characteristic equalizes the width of the first region and that of the third region to each other.

8. (Currently Amended) The video processing method according to claim 4, wherein ~~said S-shaped~~ selected output data correction characteristic equalizes the sum of the widths of the first and third regions to the width of the second region.

9. (Currently Amended) A video processing device for dividing an input data region representative of a range of digital luminance data into a plurality of regions comprising substantially all of said input data region and for selecting one of a plurality of output data correction characteristics, each of said plurality of output data correction characteristics being non-linear as a whole, but comprising a linear portion coextensive with each of said plurality of regions and having different slopes in at least two of said regions, ~~correcting digital luminance data in accordance with the trapezoidal characteristic which is nonlinear and continuous as a whole and consists of a linear portion in said first region where the gain is greater than one, a linear portion in said second region where the gain is equal to one exactly or approximately, and a linear portion in said third region where the gain is smaller than one,~~ comprising:

a component generator for generating components including post-correction output luminance data in first, second and third regions from pre-correction input luminance data and data which determine the boundary value between the first and second regions and the boundary value between the second and third regions; and

a selective compositor for selecting the components generated by said component generator in response to signals for identifying the first, second and third regions, and producing post-correction output luminance data over the ~~entire regions~~ input data region of the input luminance data.

10. (Currently Amended) A video processing device for dividing an input data region representative of a range of digital color difference data into a plurality of regions comprising substantially all of said input data region and for selecting one of a plurality of output data correction characteristics, each of said plurality of output data correction characteristics being non-linear as a whole, but comprising a linear portion coextensive with each of said plurality of regions and having different slopes in at least two of said regions, comprising:

a data separator circuit for separating luminance data and color difference data from digital video data which are composed of the luminance data and the color difference data ~~combined~~ to be ~~multiplex~~ multiplexed; and

a luminance corrector circuit for correcting the luminance data separated by said data separator circuit ~~in accordance with the trapezoidal characteristic which is nonlinear and continuous as a whole and consists of a linear portion in said first region where the gain is greater than one, a linear portion in said second region where the gain is equal to one exactly or approximately, and a linear portion in said third region where the gain is smaller than one~~.

11. (Currently Amended) A video processing device for dividing an input data region representative of a range of digital color difference data into a plurality of regions comprising substantially all of said input data region and for selecting one of a plurality of output data correction characteristics, each of said plurality of output data correction characteristics being non-linear as a whole, but comprising a linear portion coextensive with each of said plurality of regions and having different slopes in at least two of said regions, comprising:

a data separator circuit for separating luminance data and color difference data from digital video data which are composed of the luminance data and the color difference data ~~combined~~ to be ~~multiplex~~ multiplexed; and

a luminance corrector circuit for correcting the luminance data separated by said data separator circuit, ~~in accordance with either characteristic selected out of the~~ wherein one of said plurality of output data correction characteristics is a trapezoidal characteristic which is nonlinear and continuous as a whole and consists of a linear portion in ~~said~~ a first region where the gain is greater than one, a linear portion in ~~said~~ a second region where the gain is equal to one exactly or approximately, and a linear portion in ~~said~~ a third region where the gain is smaller than one ~~and the~~ , and one of said plurality of output data correction characteristics is an S-shaped characteristic which is nonlinear and continuous as a whole and consists of linear portions in said first and third regions where the gain is smaller than one, and a linear portion in said second region where the gain is greater than one.

12. (Currently Amended) A video processing device for dividing an input data region representative of a range of digital color difference data into a plurality of regions comprising substantially all of said input data region and for selecting one of a plurality of output data correction characteristics, each of said plurality of output data correction characteristics being non-linear as a whole, but comprising a linear portion coextensive with each of said plurality of regions and having different slopes in at least two of said regions, comprising:

a data separator circuit for separating luminance data and color difference data from digital video data which are composed of the luminance data and the color difference data ~~combined~~ to be ~~multiplex~~ multiplexed;

a luminance corrector circuit for correcting the luminance data separated by said data separator circuit~~, in accordance with the trapezoidal characteristic which is nonlinear and continuous as a whole and consists of a linear portion in said first region where the gain is greater than one, a linear portion in said second region where the gain is equal to one exactly or approximately, and a linear portion in said third region where the gain is smaller than one~~; and

a control processing circuit for executing gain control or hue control with regard to the color difference data separated by said data separator circuit.

13. (Currently Amended) A video processing device for dividing an input data region representative of a range of digital color difference data into a plurality of regions comprising substantially all of said input data region and for selecting one of a plurality of output data correction characteristics, each of said plurality of output data correction characteristics being non-linear as a whole, but comprising a linear portion coextensive with each of said plurality of regions and having different slopes in at least two of said regions, comprising:

a data separator circuit for separating luminance data and color difference data from digital video data which are composed of the luminance data and the color difference data ~~combined~~ to be ~~multiplex~~ multiplexed;

a luminance corrector circuit for correcting the luminance data separated by said data separator circuit, ~~in accordance with either characteristic selected out of the~~ wherein one of said plurality of output data correction characteristics is a trapezoidal characteristic which is nonlinear and continuous as a whole and consists of a linear portion in ~~said~~ a first region where the gain is greater than one, a linear portion in ~~said~~ a second region where the gain is equal to one exactly or approximately, and a linear portion in ~~said~~ a third region where the gain is smaller than one ~~and the~~ , and one of said plurality of output data correction characteristics is an S-shaped characteristic which is nonlinear and continuous as a whole and consists of linear portions in said first and third regions where the gain is smaller than one, and a linear portion in said second region where the gain is greater than one; and

a control processing circuit for executing gain control or hue control with regard to the color difference data separated by said data separator circuit.

14. (Original) The video processing device according to claim 10, further comprising a data compositor circuit for compositing the output luminance data of said luminance corrector circuit and the output color difference data of said data separator circuit or said control processing circuit.

15. (Original) The video processing device according to claim 11, further comprising a data compositor circuit for compositing the output luminance data of said luminance corrector circuit and the output color difference data of said data separator circuit or said control processing circuit.

16. (Original) The video processing device according to claim 12, further comprising a data compositor circuit for compositing the output luminance data of said luminance corrector circuit and the output color difference data of said data separator circuit or said control processing circuit.

17. (Currently Amended) A digital video appliance comprising, as a video processor therein, a video processing device for dividing an input data region representative of a range of digital luminance data into a plurality of regions comprising substantially all of said input data region and for selecting one of a plurality of output data correction characteristics, each of said plurality of output data correction characteristics being non-linear as a whole, but comprising a linear portion coextensive with each of said plurality of regions and having different slopes in at least two of said regions; said video processing device ~~for correcting digital luminance data in accordance with the trapezoidal characteristic which is nonlinear and continuous as a whole and consists of a linear portion in said first region where the gain is greater than one, a linear portion in said second region where the gain is equal to one exactly or approximately, and a linear portion in said third region where the gain is smaller than one,~~ comprising:

a component generator for generating components including post-correction output luminance data in first, second and third regions from pre-correction input luminance data and

data which determine ~~the~~ a boundary value between the first and second regions and ~~the~~ a boundary value between the second and third regions; and

a selective compositor for selecting the components generated by said component generator in response to signals for identifying the first, second and third regions, and producing post-correction output luminance data over the ~~entire regions~~ input data region of the input luminance data.

18. (Currently Amended) A digital video appliance comprising, as a video processor therein, ~~the~~ a video processing device for dividing an input data region representative of a range of digital color difference data into a plurality of regions comprising substantially all of said input data region and for selecting one of a plurality of output data correction characteristics, each of said plurality of output data correction characteristics being non-linear as a whole, but comprising a linear portion coextensive with each of said plurality of regions and having different slopes in at least two of said regions, ~~said video processing device~~ comprising:

a data separator circuit for separating luminance data and color difference data from digital video data which are composed of the luminance data and the color difference data ~~combined~~ to be ~~multiplex~~ multiplexed; and

a luminance corrector circuit for correcting the luminance data separated by said data separator circuit~~, in accordance with the a trapezoidal characteristic which is nonlinear and continuous as a whole and consists of a linear portion in said first region where the gain is greater than one, a linear portion in said second region where the gain is equal to one exactly or approximately, and a linear portion in said third region where the gain is smaller than one~~.

19. (Currently Amended) A digital video appliance comprising, as a video processor therein, ~~the~~ a video processing device for dividing an input data region representative of a range of digital color difference data into a plurality of regions comprising substantially all of said input data region and for selecting one of a plurality of output data correction characteristics, each of said plurality of output data correction characteristics being non-linear as a whole, but comprising a linear portion coextensive with each of said plurality of regions and having different slopes in at least two of said regions, ~~said video processing device~~ comprising:

a data separator circuit for separating luminance data and color difference data from digital video data which are composed of the luminance data and the color difference data ~~combined~~ to be ~~multiplex~~ multiplexed; and

a luminance corrector circuit for correcting the luminance data separated by said data separator circuit, ~~in accordance with either characteristic out of the~~ wherein one of said plurality of output data correction characteristics is a trapezoidal characteristic which is nonlinear and continuous as a whole and consists of a linear portion in ~~said~~ a first region where the gain is greater than one, a linear portion in ~~said~~ a second region where the gain is equal to one exactly or approximately, and a linear portion in ~~said~~ a third region where the gain is smaller than one and ~~the~~ , and one of said plurality of output data correction characteristics is an S-shaped characteristic which is nonlinear and continuous as a whole and consists of linear portions in said first and third regions where the gain is smaller than one, and a linear portion in said second region where the gain is greater than one.

20. (Currently Amended) A digital video appliance comprising, as a video processor therein, ~~the~~ a video processing device for dividing an input data region representative of a range of digital color difference data into a plurality of regions comprising substantially all of said input data region and for selecting one of a plurality of output data correction characteristics, each of said plurality of output data correction characteristics being non-linear as a whole, but comprising a linear portion coextensive with each of said plurality of regions and having different slopes in at least two of said regions, ~~said video processing device~~ comprising:

a data separator circuit for separating luminance data and color difference data from digital video data which are composed of the luminance data and the color difference data ~~combined~~ to be ~~multiplex~~ multiplexed;

a luminance corrector circuit for correcting the luminance data separated by said data separator circuit~~, in accordance with the trapezoidal characteristic which is nonlinear and continuous as a whole and consists of a linear portion in said first region where the gain is greater than one, a linear portion in said second region where the gain is equal to one exactly or approximately, and a linear portion in said third region where the gain is smaller than one~~; and

a control processing circuit for executing gain control or hue control with regard to the color difference data separated by said data separator circuit.

21. (Currently Amended) A digital video appliance comprising, as a video processor therein, ~~the~~ a video processing device for dividing an input data region representative of a range of digital color difference data into a plurality of regions comprising substantially all of said input data region and for selecting one of a plurality of output data correction characteristics, each of said plurality of output data correction characteristics being non-linear as a whole, but comprising a linear portion coextensive with each of said plurality of regions and having different slopes in at least two of said regions, ~~said video processing device~~ comprising:

a data separator circuit for separating luminance data and color difference data from digital video data which are composed of the luminance data and the color difference data ~~combined~~ to be ~~multiplex~~ multiplexed;

a luminance corrector circuit for correcting the luminance data separated by said data separator circuit, ~~in accordance with either characteristic selected out of the~~ wherein one of said plurality of output data correction characteristics is a trapezoidal characteristic which is nonlinear and continuous as a whole and consists of a linear portion in ~~said~~ a first region where the gain is greater than one, a linear portion in ~~said~~ a second region where the gain is equal to one exactly or approximately, and a linear portion in ~~said~~ a third region where the gain is smaller than one ~~and the~~, and one of said plurality of output data correction characteristics is an S-shaped characteristic which is nonlinear and continuous as a whole and consists of linear portions in said first and third regions where the gain is smaller than one, and a linear portion in said second region where the gain is greater than one; and

a control processing circuit for executing gain control or hue control with regard to the color difference data separated by said data separator circuit.

22. (Original) The digital video appliance according to claim 17, further comprising:

a memory capable of holding the stored content without any power supply or with a backup power supply; and

a controller for writing a control state relative to video data as a control parameter in said memory correspondingly to video identification information which specifies the video, or to characteristic descriptive information which describes the image characteristic, wherein, when the video data are to be outputted, said controller reads out the control parameter from said memory if the video identification information or the characteristic descriptive information relative to the output video data is stored in said memory and also if the control parameter corresponding to such information is stored therein, and said controller sets the control state for the output video data in accordance with the control parameter thus read out.

23. (Original) The digital video appliance according to claim 18, further comprising:

a memory capable of holding the stored content without any power supply or with a backup power supply; and

a controller for writing a control state relative to video data as a control parameter in said memory correspondingly to video identification information which specifies the video, or to characteristic descriptive information which describes the image characteristic, wherein, when the video data are to be outputted, said controller reads out the control parameter from said memory if the video identification information or the characteristic descriptive information relative to the output video data is stored in said memory and also if the control parameter

corresponding to such information is stored therein, and said controller sets the control state for the output video data in accordance with the control parameter thus read out.

24. (Original) The digital video appliance according to claim 19, further comprising:

a memory capable of holding the stored content without any power supply or with a backup power supply; and

a controller for writing a control state relative to video data as a control parameter in said memory correspondingly to video identification information which specifies the video, or to characteristic descriptive information which describes the image characteristic, wherein, when the video data are to be outputted, said controller reads out the control parameter from said memory if the video identification information or the characteristic descriptive information relative to the output video data is stored in said memory and also if the control parameter corresponding to such information is stored therein, and said controller sets the control state for the output video data in accordance with the control parameter thus read out.

25. (Original) The digital video appliance according to claim 20, further comprising:

a memory capable of holding the stored content without any power supply or with a backup power supply; and

a controller for writing a control state relative to video data as a control parameter in said memory correspondingly to video identification information which specifies the video, or to characteristic descriptive information which describes the image characteristic, wherein, when the video data are to be outputted, said controller reads out the control parameter from said memory if the video identification information or the characteristic descriptive information

relative to the output video data is stored in said memory and also if the control parameter corresponding to such information is stored therein, and said controller sets the control state for the output video data in accordance with the control parameter thus read out.

26. (Original) The digital video appliance according to claim 21, further comprising:

a memory capable of holding the stored content without any power supply or with a backup power supply; and

a controller for writing a control state relative to video data as a control parameter in said memory correspondingly to video identification information which specifies the video, or to characteristic descriptive information which describes the image characteristic, wherein, when the video data are to be outputted, said controller reads out the control parameter from said memory if the video identification information or the characteristic descriptive information relative to the output video data is stored in said memory and also if the control parameter corresponding to such information is stored therein, and said controller sets the control state for the output video data in accordance with the control parameter thus read out.

27. (New) The video processing method according to claim 1, wherein said selected output data correction characteristic is a trapezoidal characteristic which is nonlinear and continuous as a whole and consists of a linear portion in said first region where the gain is greater than one, a linear portion in said second region where the gain is equal to one exactly or approximately, and a linear portion in said third region where the gain is smaller than one.

28. (New) The video processing method according to claim 1, wherein said selected output data correction characteristic is an S-shaped characteristic which is nonlinear and continuous as a whole and consists of a linear portion in said first region where the gain is greater than one, a linear portion in said second region where the gain is equal to one exactly or approximately, and a linear portion in said third region where the gain is smaller than one.

29. (New) The video processing method according to claim 2, wherein said selected output data correction characteristic is a trapezoidal characteristic which is nonlinear and continuous as a whole and consists of a linear portion in a first region where the gain is greater than one, a linear portion in a second region where the gain is equal to one exactly or approximately, and a linear portion in a third region where the gain is smaller than one.

30. (New) The video processing method according to claim 2, wherein said selected output data correction characteristic is an S-shaped characteristic which is nonlinear and continuous as a whole and consists of a linear portion in a first region where the gain is greater than one, a linear portion in a second region where the gain is equal to one exactly or approximately, and a linear portion in a third region where the gain is smaller than one.

31. (New) The video processing method according to claim 3, wherein said selected output data correction characteristic is a trapezoidal characteristic which is nonlinear and continuous as a whole and consists of a linear portion in a first region where the gain is greater than one, a linear portion in a second region where the gain is equal to one exactly or approximately, and a linear portion in a third region where the gain is smaller than one.

32. (New) The video processing method according to claim 3, wherein said selected output data correction characteristic is an S-shaped characteristic which is nonlinear and continuous as a whole and consists of a linear portion in a first region where the gain is greater than one, a linear portion in a second region where the gain is equal to one exactly or approximately, and a linear portion in a third region where the gain is smaller than one.

33. (New) The video processing device according to claim 9, wherein said selected output data correction characteristic is a trapezoidal characteristic which is nonlinear and continuous as a whole and consists of a linear portion in a first region where the gain is greater than one, a linear portion in a second region where the gain is equal to one exactly or approximately, and a linear portion in a third region where the gain is smaller than one.

34. (New) The video processing device according to claim 9, wherein said selected output data correction characteristic is an S-shaped characteristic which is nonlinear and continuous as a whole and consists of a linear portion in a first region where the gain is greater than one, a linear portion in a second region where the gain is equal to one exactly or approximately, and a linear portion in a third region where the gain is smaller than one.

35. (New) The video processing device according to claim 10, wherein said selected output data correction characteristic is a trapezoidal characteristic which is nonlinear and continuous as a whole and consists of a linear portion in a first region where the gain is greater than one, a linear portion in a second region where the gain is equal to one exactly or approximately, and a linear portion in a third region where the gain is smaller than one.

36. (New) The video processing device according to claim 10, wherein said selected output data correction characteristic is an S-shaped characteristic which is nonlinear and continuous as a whole and consists of a linear portion in a first region where the gain is greater than one, a linear portion in a second region where the gain is equal to one exactly or approximately, and a linear portion in a third region where the gain is smaller than one.

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37. (New) The video processing device according to claim 12, wherein said selected output data correction characteristic is a trapezoidal characteristic which is nonlinear and continuous as a whole and consists of a linear portion in a first region where the gain is greater than one, a linear portion in a second region where the gain is equal to one exactly or approximately, and a linear portion in a third region where the gain is smaller than one.

38. (New) The video processing device according to claim 12, wherein said selected output data correction characteristic is an S-shaped characteristic which is nonlinear and continuous as a whole and consists of a linear portion in a first region where the gain is greater than one, a linear portion in a second region where the gain is equal to one exactly or approximately, and a linear portion in a third region where the gain is smaller than one.

39. (New) The video processing appliance according to claim 17, wherein said selected output data correction characteristic is a trapezoidal characteristic which is nonlinear and continuous as a whole and consists of a linear portion in a first region where the gain is greater than one, a linear portion in a second region where the gain is equal to one exactly or approximately, and a linear portion in a third region where the gain is smaller than one.

40. (New) The video processing appliance according to claim 17, wherein said selected output data correction characteristic is an S-shaped characteristic which is nonlinear and continuous as a whole and consists of a linear portion in a first region where the gain is greater than one, a linear portion in a second region where the gain is equal to one exactly or approximately, and a linear portion in a third region where the gain is smaller than one.

41. (New) The video processing appliance according to claim 18, wherein said selected output data correction characteristic is a trapezoidal characteristic which is nonlinear and continuous as a whole and consists of a linear portion in a first region where the gain is greater than one, a linear portion in a second region where the gain is equal to one exactly or approximately, and a linear portion in a third region where the gain is smaller than one.

42. (New) The video processing appliance according to claim 18, wherein said selected output data correction characteristic is an S-shaped characteristic which is nonlinear and continuous as a whole and consists of a linear portion in a first region where the gain is greater than one, a linear portion in a second region where the gain is equal to one exactly or approximately, and a linear portion in a third region where the gain is smaller than one.

43. (New) The video processing appliance according to claim 20, wherein said selected output data correction characteristic is a trapezoidal characteristic which is nonlinear and continuous as a whole and consists of a linear portion in a first region where the gain is greater than one, a linear portion in a second region where the gain is equal to one exactly or approximately, and a linear portion in a third region where the gain is smaller than one.

44. (New) The video processing appliance according to claim 20, wherein said selected output data correction characteristic is an S-shaped characteristic which is nonlinear and continuous as a whole and consists of a linear portion in a first region where the gain is greater than one, a linear portion in a second region where the gain is equal to one exactly or approximately, and a linear portion in a third region where the gain is smaller than one.